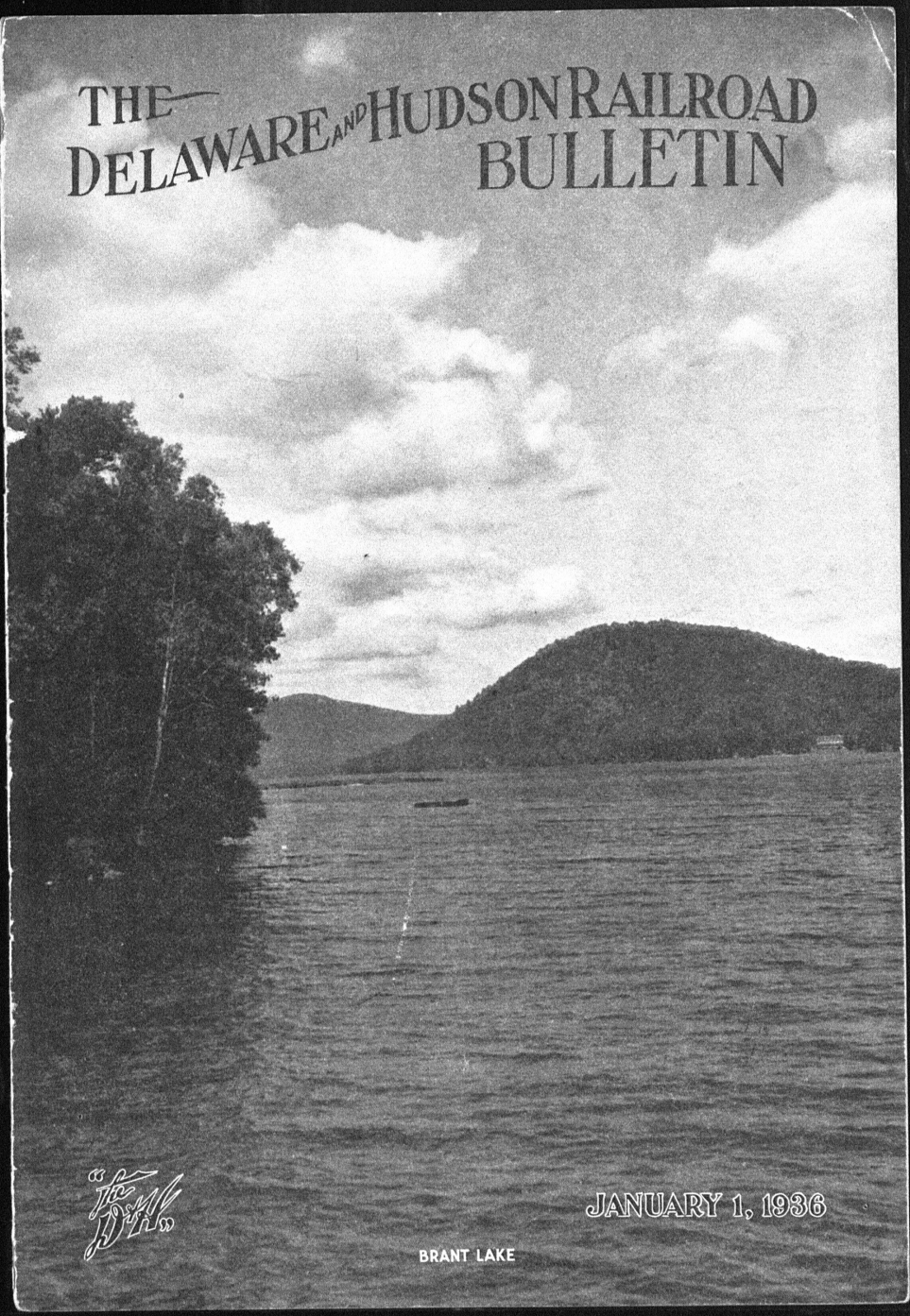
# THE DELAWARE AND HUDSON RAILROAD BULLETIN



"The D&H"

JANUARY 1, 1936

BRANT LAKE

# A Happy New Year

*To leave the old with a burst of song,*
*To recall the right and forgive the wrong;*
*To forget the thing that binds you fast*
*To the vain regrets of the year that's past;*
*To have the strength to let go your hold*
*Of the not worth while of the days grown old;*
*To dare to go forth with a purpose true,*
*To the unknown task of the year that's new;*
*To help your brother along the road*
*To do his work and lift his load;*
*To add your gift to the world's good cheer,*
*Is to have and to give a Happy New Year.*

—ROBERT B. BEATTIE.

The DELAWARE AND HUDSON RAILROAD CORPORATION BULLETIN

# Accidents Were Frequent

## When Wilkes-Barre Veteran Began Railroading on the Gravity

RAILROADING was a hazardous calling in the days before the advent of air brakes, automatic signals and couplers. Scarcely a day passed at the larger terminals when someone didn't lose an arm, a leg, or his life, and few railroaders weathered that era without carrying with them a reminder of the times. Among the few exceptions is WILLARD NEWTON, retired conductor, whose service record includes three years on the Gravity Railroad and 51 years on the steam railroad of the Delaware and Hudson.

WILLARD NEWTON

Only once in those 54 years was he injured, and that accident might very well have happened off duty. His train was standing at Green Ridge when he stepped into a ditch, fell, and broke his leg, a minor injury in those days.

Born at Peckville, Lackawanna County, Pa., June 10, 1863, the son of a former Delaware and Hudson employe, MR. NEWTON resolved while still a boy that if the opportunity ever offered for him to work on the railroad he would do so. He stood for hours at a time watching Delaware and Hudson crews switching cars near his home. Theirs was the most interesting and fascinating work in the world to the young school boy.

After completing the course in the grade school at Peckville, MR. NEWTON applied for a position on the Gravity and, at the age of 16, was hired by "Bill" McMullin, to work for $1.55 a day. He was immediately made a runner, operating gravity trains between Olyphant and Carbondale. Reporting for work at Olyphant in the morning, he took part of a train of empties south to the foot of "G" plane, where he picked up a string of loads for the run to Carbondale. The entire train was divided into three sections: he, as headman, took the first 20 cars, the middleman rode the next cut of 20, while the "boss runner" operated the remainder.

When his string of loads had been assembled at the foot of "G," he rode the first cut up the plane, waiting there for the balance. When the entire string had been hoisted up the plane, he rode them across the level to the foot of "E" at Peckville. The operation was repeated at "D" plane, Archbald, and "B" above Archbald. There he waited for the middleman and "boss" to overtake him, whereupon all the cars were coupled together for the balance of the run to Carbondale.

On the return trip the cars ran by gravity from

Carbondale to the foot of "C" at Archbald and from the top of that plane they "free-wheeled" back to the foot of "G." Three round trips constituted a day's work.

After three years on the Gravity, business fell off and MR. NEWTON and several others were laid off, although they were told that they would be given work when vacancies occurred either on the Gravity or steam road. A few months later, in the fall of 1885, he was called to work on the steam railroad as a trainman at Plymouth. For some time he worked on various mine runs out of Plymouth with engine No. 26, named *Colonel Cannon*.

When the steam road was completed from Wilkes-Barre to Hudson, giving the Delaware and Hudson a continuous line from Wilkes-Barre to Carbondale, MR. NEWTON went to work on one of the first through runs. Although there was only one short stretch of single track in those 35 miles, it generally took eight hours for the round trip of 70 miles; sometimes it was ten or twelve hours.

One trip stands out in MR. NEWTON'S memory. Perhaps it was during the blizzard of '88—the date escapes him. His crew started out of Wilkes-Barre at 3:10 A. M. with one engine and about 20 loaded cars. At Olyphant a culm pile on each side of the track formed a cut, which had drifted full of snow. When the engine struck the drift it stalled. MR. NEWTON, then flagman, ran back to the station at Olyphant and waited all day for the engineer to "call in the flag." Finally, seven hours after they stalled, an engine battered its way through from Carbondale to pull them out.

MR. NEWTON'S experience on the Gravity was of great value to him in his new work and at the end of three months he was given occasional runs as an extra conductor. After he was promoted he had a yard crew at Wilkes-Barre for over seven years. In the late eighties the Delaware and Hudson handled a tremendous volume of traffic through Wilkes-Barre, interchanging hundreds of cars daily with the Pennsylvania, Lehigh Valley, and Jersey Central. Very little coal was moved through the Wilkes-Barre yard; most of the tonnage handled was other freight.

MR. NEWTON finally gave up his yard job to take a mine run, and later returned to the through freight service. When these runs were extended to Oneonta he bid in one of them, completing twelve years in the Wilkes-Barre-Oneonta pool before retiring on pension September 1, 1934.

Passenger service never appealed to MR. NEWTON, even though, in later years, he could have had such a run if he so chose. Of all the runs on the division he preferred through freights.

MR. and Mrs. NEWTON, who live at 129 Wyoming Street, Wilkes-Barre, have three children: CLARENCE, Delaware and Hudson yardmaster at Hudson; Edgar, at present unemployed; and a daughter, Mrs. Mary Baughman, of Wilkes-Barre. MR. NEWTON is a member of the Order of Railway Conductors, the Junior Mechanics, and the Delaware and Hudson Veterans' Association.

## Rubber from Gas

IF most of us were called upon to produce synthetic rubber it would be hard to decide what to start with. Perhaps Edison's experiments with the goldenrod plant might give us an idea but it is improbable that we should connect rubber and its characteristics with acetylene gas!

This gas, which was also used by the Germans during the war as the starting point in the making of their artificial rubber, is used by the Du Pont Company in the production of DuPrene, a substance which is more resistant to oxygen than ordinary rubber, hence deteriorating less rapidly. Its vulcanization needs neither sulphur nor long heating, yet it stands abrasion far better than rubber.

In its earlier stages it resembles the latex from the rubber tree except that its finer particles permeate fabrics of cotton, or such materials as leather, wood and tile to completely exclude moisture and strengthen the fibers of textiles.

The rapid deterioration of rubber which comes in contact with oils and its tendency to dissolve in gasoline makes it shortlived in many types of service. DuPrene is little affected. Samples have been kept in kerosene for as long as three years without showing any change. As a gasket material it should find a wide market.

Starting with coke and lime, which when heated together in an electric furnace give calcium carbide to which water is added to produce acetylene, and then sal-ammoniac and muriatic acid gas and, presto!—synthetic rubber. It isn't quite as simple as that because certain helpful chemicals called catalyzers are used at various stages, though they form no part of the finished material.

Although the Germans started from the same acetylene gas, the product they obtained during the war, after a process which required five months, was very poor, whereas DuPrene is superior to natural rubber. This offsets the fact that it is slightly more expensive to produce.

### Precisely

Scotsman—What wull the time be, sir?

Englishman—When?

# Justice from the Government

## Required for Survival of Railroads Under Private Ownership

AMERICAN railroads will survive under private ownership and render adequate and increasing service if they receive justice from the government, in the opinion of PRESIDENT L. F. LOREE. Speaking before the Institute of Arts and Sciences at Columbia University recently, MR. LOREE asserted that denial of justice means government ownership and a "parasite" railroad industry.

"The problem of equalizing terms of competition in transportation is not merely one of regulation," he said. "It is also one of government competition and government subsidies.

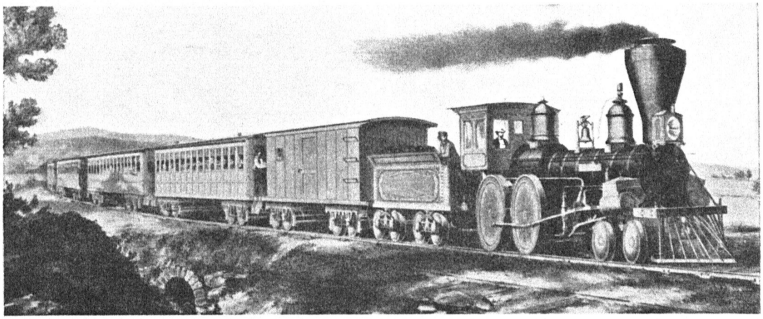
"In the early days the railroads were aided by United States Government grants, in the form of land, or relief from taxation, but such railroads as benefited (some 17,600 miles of line) received from the United States and individual states 155,500,000 acres of land, of which they have patented only 132,000,000, and which when given them was being sold by the grantors at from 41 cents to $1.67 an acre. The average selling price for the lot during the twenty-year period covered by the grants was 94 cents per acre, a total value of perhaps $125,000,000.

"The land-grant railroads were obligated to handle government freight and passengers at one-half the commercial rates and mail at four-fifths the going rates for mail paid by the government under contracts. This annual saving is estimated at $5,000,000. So that every 25 years without end the government gets back the full value the land had when the qualified donation was made. Competition spread the effect of the rate reductions upon all competing carriers. It could not be confined to the land-grant roads.

"At the present time buses and trucks, both in interstate and intrastate service, are subsidized in the form of free use of the highways built with public funds. Airplanes receive subsidies in the form of mail contracts, and the government continues to pour tremendous sums into the maintenance of waterways.

"We hear a great deal now of the construction by the government of power plants which, when completed, will compete with plants of private operation. The government money which has been wastefully used in highway and waterway construction to compete with private investment in railway transportation is a veritable mountain by comparison with that being utilized in competition with private investment in the power business.

"The various modes of transportation—whether it be by railroad, highway, waterway, or by airplane—should bear their proper proportion of costs, including amortization, interest, maintenance, and operation of their facilities. If they cannot bear



*"In the early days the railroads were aided"*

such charges and continue in competition, they should be reorganized or abandoned.

"Nor do I see advantage in government ownership. The railroads have been in private hands since their construction began something more than a century ago, and though during the last half century control over their affairs has been extreme and the liberty of action of their officers has been tremendously curtailed, these officers are still held and feel responsible for their operation and its results. It would be a reflection upon their ability and responsibility if the condition in which the railroads now are was due to any neglect or inadequacy of their own effort.

"Their vindication is that it is admitted on all sides that these instruments of transport have steadily improved in their character and efficiency, and that, by whatever measure we may adopt, their history is the envy of the civilized world. The railroad of tomorrow will, I feel sure, be a greatly improved instrument when compared with that of today. If the inventive genius of man is not completely stifled by the politician, there will probably be, in the next quarter of a century, changes in the art and design of transportation equal to or exceeding that of the past fifty years.

"The laws governing the railroads have been made about as drastic as human ingenuity can make them while still retaining private ownership and operation. To illustrate, federal regulation today includes the right—

"To name the maximum and minimum rates that are to be charged. Rates must be published, adhered to under penalty, may be changed only upon due notice to the public, and the railroads may not bargain or give special concessions to users, as permitted in other countries, even though long term contracts and large tonnage are the consideration, or even meet the prices of unregulated competitors except under Commission consent.

"To require the railroads to render various services desired by some part of the public, even though they cost more than they produce in terms of revenue.

"To require the railroads to increase their equipment and extend their lines, even though the management may regard this as undesirable from the point of profit; and to prevent the abandonment of a service or line, if required by an assumed public interest, though unprofitable to the railroads.

"To order the railroads to continue uninterrupted service, whether profitable or unprofitable, nor can the railroads take the profitable business and refuse to handle that which is unprofitable, as competitors do.

"To require the installation of all manner of safety devices at the order of government commissions, actuated by politicians and labor organizations, who may and do substitute their discretion for that of the private managements, as to how money for safety purposes should be spent, even

*Airplanes are subsidized*

specifying at times the precise types of equipment to employ.

"To control the issue of new securities and to determine the amount, terms, methods of sale, etc. Thus the financial policies of the railroads are subject to review, criticism, and control.

"To intervene in favor of railroad labor. Labor boards and boards of mediation afford the government a relation to wages and rules not imposed upon any other private enterprise. The new mandatory pension bill is another case in point.

"To subject the railroads to very strict control in the matter of consolidations, mergers, and interlocking directorates.

"Nobody can assume authority without accepting responsibility. With accorded justice, the railway industry can survive in private ownership and render adequate and increasing service. Without such justice, private ownership cannot continue; private initiative must fail; the railway industry must pass into government ownership and operation; it will then depend upon taxation for its support; be a parasite upon all prosperous industries, an impediment to progress, and a peril to the political independence of the people."

## Have You Slumped?

PSYCHOLOGISTS long ago established the fact that the speed at which we work is mostly a matter of habit. During the war it was noted, in many organizations, that as the volume of work doubled and tripled, the pace of the workers increased.

"Since so many of our men have entered the army," said a publisher, in war days, "most of us are obliged to do double work. We make our decisions quicker, and, so far as I can see, they are just as correct as when we took twice the time."

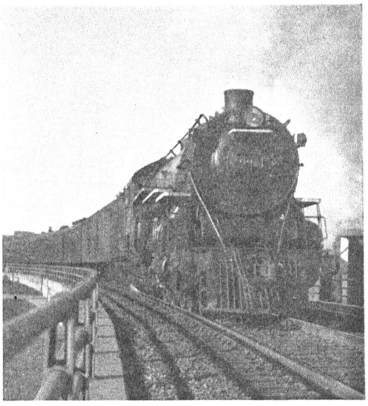
All of us are familiar with men and women who can stay out until late hours five or six evenings a week, and be just as fresh and alive during the daylight hours as people who are seldom up after 10 P. M. A day's program that would wreck many people is mere routine for others.

The feverish and excitable war days stimulated us to exert ourselves to the utmost, whereas the depression is causing us to relax dangerously. Many of us are slumping. The day's work may be a tax on our courage, but it is no tax on our energy. We are learning how to put in time.

This unwholesome condition may prove to be the greatest loss of the depression. A buyer's panic that suddenly unloosed such a demand for goods that every producer was jolted from his slumber would be a delightful stimulant. The other jolt that might stir the nation from lethargy may be universal bankruptcy.

The problem is real and serious.

From a nation of hustlers we have degenerated into a nation of time-wasters. The cure will not be easy.—*Through the Meshes.*



*Train 308 Leaving Albany*

## A Tough Job

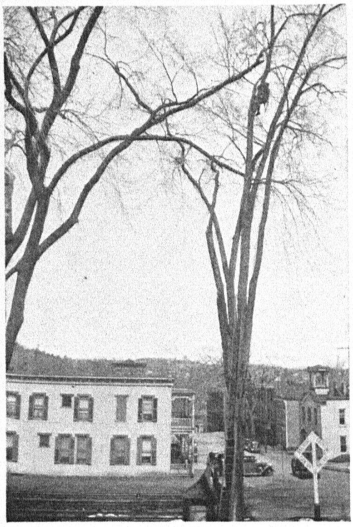
IN his autobiography Pierre Loti tells how, as a small boy, reading stories of sainthood led him to aspire to become a saint. He resolved to imitate Simeon Stylites, who lived on top of a pillar and thereby won note for sanctity.

Accordingly, he mounted a high stool in the kitchen and announced his plan to remain there for forty years. His mother and the cook, however, would have none of his sanctity, and at the end of an hour he was wistfully recording in his diary, "Thus I discovered that it is exceedingly difficult to be a saint while living with your own family."

## 1935 Index Ready

THE *Index* to Volume 15 of *The Bulletin*, including separate listings of all articles, poems and illustrations contained in the issues of 1935 is now ready for distribution. Items have been cross-indexed to assist in ready reference. Copies will be sent free on application to the Supervisor of Publications, Room 905, Delaware and Hudson Building, Albany, N. Y.

# Forestry on The Delav



*Railroad Forester trimming tree*
*Ballston, N. Y.*

WHAT is forestry? It is not even listed in a good publication of 1911. A comparable edition of 1932 says, "Forestry is the art of cultivating forests or managing growing timber." Varied definitions have been developed. H. H. Chapman in his recent book, *Forest Management*, says, "Forestry treats of the relations of the forest to human welfare. It constitutes the science and art of controlling, protecting, producing, and utilizing forests in order to realize the largest possible human benefits from their existence and use. These benefits, whether they take the form of recreation, protection of soil, control of water flow, or the growing of timber trees, are, in forestry, looked upon as continuous or perpetual. Their realization is sought through the organization, development and management of forest land on the basis of continuous renewal of the forest through regeneration, thus permitting a sustained yield of forest products while at the same time maintaining the forest with all its other attendant benefits without loss or diminution."

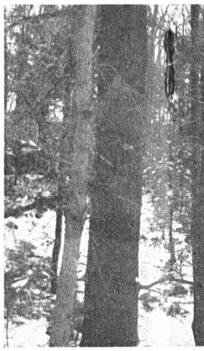
*(*Extracts from a Paper Presented at the Agents' Meeting, Hotel Champlain, Sept. 5, 1935.)*

A forest is an area of land on which trees are the dominant vegetation, and a tree is a species of woody plant ten or more feet in height at maturity. Forest trees are trees normally growing so close together as to restrict the width and form of their crown, and due to the crowding form a long, straight trunk comparatively free from branches. These are forest form trees valuable for timber. An individual of the same species growing in the open with unrestricted room for development may assume an entirely different aspect, but still be absolutely true to its native characteristics, considering the location.

A consideration of railroad forestry must go back to the early work of the Delaware and Hudson Company and its affiliates, and then still further back to the conditions obtaining at an earlier date, which in all probability prompted the start of the constructive forestry on company properties. The changes since that time are striking but they are today embodied in what we know as forestry, and to what we subscribe in a large measure under the title of conservation.

*Early Operations*

Until about 1860 the main body of the Adirondacks was still a virgin forest of pine, spruce and hardwood, due chiefly to the absence of transportation facilities. From then through the eighties and nineties exploitation was rapid and, on the opening of the Ogdensburg and Lake Champlain Railroad,



*Typical Delaware and Hudson Woodland, near Worcester, N. Y. (Compare size of man standing in center with that of full-grown tree at his right.)*

# elaware & Hudson*

By G. V. SCHWARZ, *Forester*

iron mining and smelting was started. This created a demand for softwood saw timber for construction, and hardwood charcoal for smelting. The Chateaugay Ore and Iron Company, formed in 1873, assumed direction of the Lyon Mountain mines in 1881, and for the 30 years' operation to 1903, when control was secured by the Delaware and Hudson Company, it was estimated 1,500,000 cords of hardwood were converted to charcoal from almost 100,000 acres of timberland the company had purchased. It would make a pile of wood 4 feet high and 4 feet wide, 2,273 miles long, that would reach from New York city almost to Salt Lake City, Utah.

In addition, from 1896 to 1915, 15,000 cords of spruce and fir pulpwood were cut annually and shipped to the mills in Glens Falls. This made an additional 300,000 cords removed from the Chateaugay Ore and Iron Company property and, on the basis of modern car loadings, about 1,250 carloads annually for rail haul.

There is no wonder whatever, in view of the facts, that the Delaware and Hudson Company in 1904 addressed the only forestry agency in the country, the original United States Bureau of Forestry, for information as to what could be done with these forest lands, by then and later increased to about 150,000 acres. Along with a plan to lumber the remaining merchantable stand in such a manner as to promote natural regenaration, and

*Mistletoe "Broom," on tree in center, a plant parasite causing extensive damage*

again rebuild the forest capital, reforestation was suggested. Repeated forest fires in 1903, 1908, 1911, and 1915 burned over three-quarters of the property, destroying much remaining growth as well as the humus soil cover so necessary and desirable for new tree growth. Over wide areas planting was the only way a new stand could be secured.

*Nurseries and Plantations*

It is a notable fact that in 1904 the first forestry measures should have been instituted by the Delaware and Hudson Company, only two years after the start of reforestation by the State of New York on the Forest Preserve lands. In 1906 a nursery was established at Wolf Pond on the Chateaugay Branch, and in 1910 it was replaced by one at Bluff Point. This was indeed a pioneer effort since no one in this country was experienced in forest tree nursery work, and the obstacles encountered were numerous. However, planting of white, red, and Scotch pine, Norway and white spruce and many others was started in 1908 and with the exception of the years 1909, 1911 and 1919, was continued until 1927, when about 12,500 acres had been restocked with over 14,000,000 trees.

Starting in 1910 plantations were established on certain Delaware and Hudson Railroad, Bluff Point Land Improvement Company, and Hudson Coal

*(Continued on page 13)*

*The*
Delaware and Hudson Railroad
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PUBLISHED MONTHLY by The Delaware and Hudson Railroad Corporation, for the information of the men who operate the railroad, in the belief that mutual understanding of the problems we all have to meet will help us to solve them for our mutual welfare.

All communications should be addressed to the Supervisor of Publications, Delaware and Hudson Building, Albany, N. Y.

Vol. 16 January 1, 1936 No. 1

## "Letter" Men

LETTER" men are no longer the sole property of schools and colleges. What with the government's "G-men" hunting public enemies, "T-men" going out to stop traffic violations, and the utilities organizing an army of "U-men" to defend their industry against the destructive attacks of those who, having nothing of their own, would destroy everything of value in a vain attempt to redistribute wealth, the country is overrun with "men of letters."

Yet their efforts are relatively ineffective since each group pursues its objective independently of the others. That the criminals are in the minority in this conutry, no one disputes. On the other hand, there are too many "near criminals," petty racketeers if you wish, who "get away with" as much as they dare to, depending on influence or good luck to "get them by" if they are caught.

The automobile is probably the most prolific source of these minor infractions, many of which are merely exhibitions of bad manners resulting from the queer influence a hold on a steering wheel has on the human mind. "Do unto the other fellow as you are afraid he may do unto you if you give him the chance," has displaced the fundamentals of common decency, not to say courtesy, among drivers. Yes, we do it ourselves!

Then there are the thousand and one little things that we do that we don't care to have generally known; our little "rackets," so to speak. If you don't bother us, we won't bother you.

One great deterrent to doing one's duty as a citizen in many cases is the fear of the consequences, usually some form of political or social persecution. This has been the stock in trade of the big criminals and crooked politicians. To "get something on you" is to have you in their power, regardless of how unimportant that something is. Fear of exposure often leads to the commission of a far worse act and things go from bad to worse.

To save this country from itself requires an organization of HE-men, of both sexes if you wish, who will dare to stand for what is right, both by word and deed. Such a group, under proper leadership, can revive the flagging morality of the country. Perhaps this cannot be achieved over night, but it will get a tremendous start if only half the number of persons who read this resolve to start off 1936 by brushing up on their manners, especially when at the wheel, and putting the Golden Rule into everyday use.

There will be many a time when even that will be a job for a HE-man.

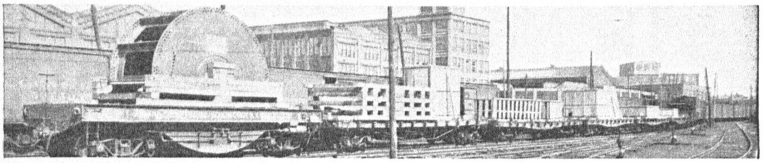
## Noise Costs Money

PERHAPS the staccato bark of a locomotive exhaust comes immediately to your mind on reading this heading, or it may be a recollection of the racket incident to the celebration of the Fourth of July, or even the squealing of a hot journal. In any case, the noise is the manifestation of the release of a quantity of energy that is being put to no good use, thus causing economic waste.

The greatest measurable waste caused by preventable noises occurs in our offices and shops. The Aetna Life Insurance Company is believed to be the first to make actual tests on pieceworkers under noisy conditions, the results being later compared with those obtained after steps had been taken to reduce the tumult. These tests showed that a reduction in the noise level of the room of 14.5 per cent raised the employes' efficiency 8.8 per cent. Errors of typists were reduced 29 per cent while those of machine operators were 52 per cent less frequent. Employe turnover was reduced 47 per cent, and absences 37.5 per cent.

Here we have figures, that can easily be turned into dollars and cents, to show the cost of noise. In addition, the medical profession knows that sleep is not as restful amid noisy conditions as when comparative quiet prevails.

The elimination of unnecessary noise and confusion, whether at work, on the street, or at home is well worth some study. Noise is expensive in more ways than we realize.



# We All Lost!

## What Hurts Any Industry Hurts All

HOW one thing leads to another is illustrated by the effect of the threat of government ownership of electrical utility companies and its relation to the railroads and other industries of the country.

With the menace of government competition and dissolution hanging over it, it is not surprising that no new extension of plant facilities was carried out and as little as possible spent on maintenance in one of the most progressive fields of American industry.

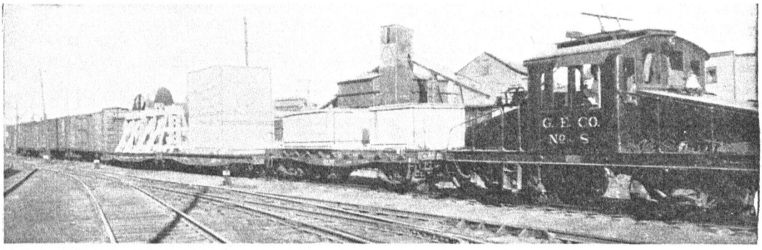
Prior to the adoption of the present attitude of the government the advances made from year to year had steadily reduced the cost of producing and distributing electric power. Efficiency of steam generating plants was still being raised, the combination of mercury vapor turbines with the steam type offering possibilities of further improvement.

With the shutting down of this development and plant expansion program the utilities were forced to reduce expenditures which in 1929 totaled $853,000,000 and in 1930 were $917,000,000, to $129 millions in 1933, a bare 100 millions in 1934, and even less last year. So there was some $800,000,000 worth of business which the manufacturers of the country lost. Idle plants and employes resulted. Likewise, the railroads, though well equipped to handle the extra business, stood rusting out, their employes furloughed.

Interference with our economic machine at any point is likely to bring about most unexpected and least desired effects, especially on the innocent bystanders, which the railroaders are in this case.

## Why?

DURING the World War the government took over all the railroads of the nation. Factories were humming; training camps were built; munitions, food, clothing, and men were rushed to concentration points; freight rates were boosted 30 per cent, passenger rates went up 20 per cent; never had the railroads been so busy, yet there resulted huge operating losses which the taxpayer felt for years thereafter. At the very time that private industries were making a financial killing because of increased prices and orders, the railroads, with corresponding increase in charges and business, suffered huge deficits through government mismanagement.—*E. C. Garvin.*



# The Meaning of Sanctions

A "SANCTION" is any measure taken in support of a law to compel obedience to it. In the international field, under the Covenant of the League of Nations, sanctions may be applied by the League against those members who refuse to observe international agreements or who resort to war as a means of settling disputes.

The members of the League are bound under Article X of the Covenant to respect and preserve against external aggression the territorial integrity and political independence of any member of the League. "In case of any aggression," the Article reads, "or in case of any threat or danger of aggression, the Council shall advise upon the means by which this obligation shall be fulfilled." Action of the League under this article must be unanimous.

Article XVI defines measures that may be applied against a member of the League if it resorts to war in disregard of its obligations under the Covenant. In that case, the offending member is *ipso facto* deemed to have committed an act of war against all other members of the League which "hereby undertake immediately to subject it to sanctions." Article XVI can be applied without a unanimous decision, but action under it cannot be taken until actual resort to war takes place. This Article is being applied to Italy.

Sanctions are classified into three categories: (1) moral and diplomatic; (2) financial and economic; and (3) military, naval, and air.

Moral and diplomatic sanctions depend for their effectiveness largely on the force of world public opinion, although they may exert some economic influence by undermining the credit standing of the country.

Financial and economic sanctions may take the form of a refusal to extend long-term loans, short-term credits, or commercial credits, or embargo on shipments of war materials, foodstuffs, and raw materials; refusal to accept any imports from the aggressor; or a complete international boycott; that is, "severance of all trade and financial relations, the prohibition of all intercourse between their (League members') nationals and the nationals of the Covenant-breaking State, and the prevention of all financial, commercial or personal intercourse between the nationals of the Covenant-breaking State and the nationals of any other State, whether a member of the League or not."

The effectiveness of economic sanctions would depend on their completeness and on the strength and wealth of the aggressor country. A complete international boycott would unquestionably constitute a tremendous punishment for most countries of the world. The application of economic sanctions, however, raises several extremely difficult questions. Obviously some countries, those whose trade relations with the aggressor are economically important, would lose more than others. Article XVI, in fact, provides that the members of the League shall support one another financially in order to save certain countries from disproportionate losses. Furthermore, difficulties would inevitably arise in connection with the interference with the trade of non-member states and those member states who do not vote for the sanctions. Finally, universal boycott would inevitably mean war, if the aggressor country refused to bow to the authority of the League.

The nature of the military, naval, and air measures is to be decided by the Council. The Council may give a mandate to a single state or a number of states to apply whatever military, naval, and air measures may be necessary. Any member of the League, however, is authorized to decide for itself whether or not military sanctions should be applied as well as to determine what sort of action it will undertake against the aggressor.—*Conference Board Bulletin.*

## Have You Ever Noticed

When the other fellow acts that way, he is "ugly;" when you do, it's "nerves."

When the other fellow is set in his ways, he's "obstinate;" when you are, it's just "firmness."

When the other fellow doesn't like your friend, he's "prejudiced;" when you don't like his, you are simply showing that you are a good judge of human nature.

When the other fellow tries to treat some one especially well, he's "toadying"; when you try the same game, you are using tact.

When the other fellow takes time to do things, he is "dead slow"; when you do it, you are "deliberate."

When the other fellow spends a lot, he is a spendthrift; when you do, you are generous.

### Don't Worry

Nervous Traveler—"But suppose there is an accident, and the bus upsets?"

Driver (cheerfully) — "No need to worry, ma'am, the company got plenty more buses."

## Forestry

*(Continued from page 9)*

Company properties in Pennsylvania. They have been, in the case of the Railroad, continued to the present. The half million red oak and black locust trees planted in Pennsylvania in 1911, 1913, 1914, and 1917 were in most cases about all destroyed by fire and by the browsing of cattle. At several of the locations there is no record available other than a report of successful survival two years after planting, but it is doubtful they have fared better than the others, since a certain minimum of protection against fire, insects, and trespass is necessary for all forest property.

In 1911, 201,000 Scotch pines were planted on Delaware and Hudson Railroad properties near Delanson, Duanesburg, South Schenectady, Meadowdale, Mechanicville, Castleton, Vt., and at several locations on the Adirondack Branch. Most of these were burned out that first season, so in 1912 an additional 167,000 were planted to complete the stocking of 1,200 trees per acre spaced 6 by 6 feet. These were all forest plantings but at some locations they also served as wind and snow protection, and as an aid in stabilizing shifting soil.

Some of them are today left only widely scattered trees of open growth, short and heavily branched, but there still remain 65 acres where the survival has been sufficient to compose a fairly well stocked stand. In the former instance, at some locations natural regeneration from seed of these scattered trees has established growth to the extent that but very little or no plantings will be necessary to fill the areas. This naturally seeded stock seems more vigorous, straighter, and of a less branching habit than the parent trees, and has been of considerable interest to investigators into the naturalization of this introduced species.

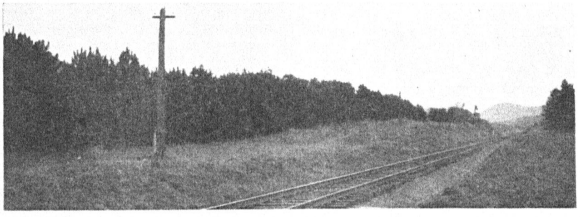
The old plantations, as we designate those areas where a measure of success attended the operation, now present a true forest aspect with many trees from 6 to 8 inches in diameter and over 30 feet tall. In most instances they have been pruned to remove the dead branches which result when the crowns develop and cast too dense a shade for growth. This operation reduces the fire hazard, adds nutriment to the soil from the decay of debris, and greatly improves the quality of the lumber, since the knots will be confined to a small core in the center of the log and all subsequent growth will produce clear high grade wood.

As the trees attain greater size it is obvious that a given area will support fewer numbers and so there is a natural elimination of the weaker individuals. Forest management calls for thinnings before this competition retards growth of the entire stand and so this operation has been conducted at several of the plantations. Fortunately a market for the material as low grade fuel, since it is a softwood low in heat value, was secured, and so the cost was greatly reduced and the desired rate of growth maintained.

### *Living Snow Fences*

At the same time and at later intervals, line plantings, of red pine, Scotch pine and Norway spruce were made along the right of way for snow protection. There is a history of survival similar to that of the forest plantations, and where it was reasonably successful there are now presented luxuriant barriers of foliage that very effectively protect the track from snow. They were established at a relatively low cost and have been furnishing this protection for at least 15 years, and with continued maintenance should be effective for many more years. The hedge-like character of these tree snow fences is in addition a distinct improvement in the appearance of the right of way. Earlier pruning, and development of the trees into even more of a hedge-like formation would have greatly reduced maintenance and certainly added years to their usefulness.

*(To be concluded.)*



*Red Pine Snow Fence, Planted 1915, So. Corinth, Adirondack Branch.*

# What It Costs

## To Travel or Ship by Rail

IN 1934 Class I railways received an average of $1.92 in freight revenues for each ton of freight transported. The average ton of freight was carried approximately 196 miles.

In 1921 the average haul per ton of freight transported was 181 miles and the average revenue per ton was $2.31. Thus in 1934, as compared with 1921, the average haul of a ton of freight increased 15 miles and the average charge for this greater service had been reduced by 39 cents.

Similarly from 1921 to 1934 the average trip per railway passenger had increased from 36 miles to 40 miles, while average revenue per passenger had declined 34 cents, from $1.11 in 1921 to $0.77 in 1934.

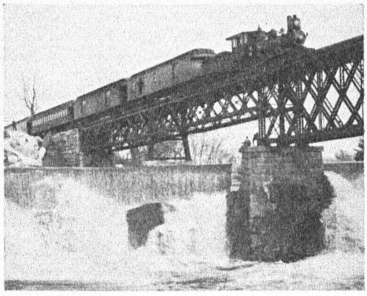
The following table presents figures for Class 1 lines showing average revenue per ton of freight transported, average haul per ton of freight, average revenue per passenger, and average trip per passenger:

| *Year* | *Average Revenue Per Ton* | *Average Haul Per Ton (Miles)* | *Average Revenue Per Passenger* | *Average Trip Per Passenger (Miles)* |
|---|---|---|---|---|
| 1916 | $1.17 | 166.28 | $0.70 | 34.38 |
| 1920 | 1.91 | 181.55 | 1.04 | 37.94 |
| 1921 | 2.31 | 181.48 | 1.11 | 36.03 |
| 1922 | 2.17 | 184.30 | 1.11 | 36.66 |
| 1923 | 1.97 | 176.86 | 1.16 | 38.46 |
| 1924 | 2.00 | 178.85 | 1.15 | 38.70 |
| 1925 | 1.97 | 179.59 | 1.19 | 40.47 |
| 1926 | 1.95 | 179.99 | 1.21 | 41.14 |
| 1927 | 1.96 | 181.39 | 1.17 | 40.55 |
| 1928 | 1.98 | 183.31 | 1.14 | 39.99 |
| 1929 | 1.96 | 182.46 | 1.12 | 39.81 |
| 1930 | 1.98 | 185.86 | 1.04 | 38.11 |
| 1931 | 2.02 | 192.66 | 0.92 | 36.71 |
| 1932 | 2.09 | 200.27 | 0.79 | 35.44 |
| 1933 | 1.98 | 197.98 | 0.76 | 37.74 |
| 1934 | 1.92 | 191.18 | 0.77 | 40.09 |

## Temporary

A man who was recently re-elected to a position that he had held for many years, met a friend who congratulated him on his continued good fortune. To this the other replied: "Yes, but it can't always last; I have to give it up some day. I feel a great deal like a man I knew who worked on a railway for forty years, and when pensioned at last on account of old age remarked: 'Well, when I came here I knew I wouldn't have a steady job.' "

## On The R. & W.



*Engine 397 and train on bridge over falls of Otter Creek, Center Rutland, about 1890. Bridge was destroyed in flood of 1927.*

## Working a Miracle

APPRECIATION of the benefits of railways is rapidly taking place in the American popular press, which has often been devoted in the past to abuse. This was strikingly illustrated recently in an article in the *Jacksonville Times-Union* of Florida which paid tribute to the important part which the railways play in the transport and distribution of fresh fruits and vegetables in the United States. "The miracle which has been wrought," it says, "is not only in the physical transportation of perishable products, but in their distribution over wide areas at such low costs as to make it possible for everybody to use them. Today nearly every state in the Union enjoys oranges from Florida and California, apples from Washington and Oregon, cantaloupes from California, and bananas from Latin America." In support of this claim it shows that potatoes from Maine are marketed in 29 states, from Idaho in 33 states, from Virginia in 28 states, and from Florida in 25 states. Moreover, of the 66 leading market centers in the United States, 43 receive strawberries from Louisiana, 58 receive peaches from Georgia, 37 receive grapes from Arkansas, 41 receive cantaloupes from Arkansas, 51 receive watermelons from Florida, 59 receive celery from Florida, and 48 receive tomatoes from Mississippi. The article concludes that, "wherever the rail network reaches, these and other products of farm, factory, mine, and shop are available at prices only slightly higher than are paid in the communities in which they are produced."

# Clicks from the Rails

*Portable Ticket Offices*

are being used by the New Zealand Railways on the docks in the principal seaports. When a boat docks a passenger may go to one of these movable booths, arrange for the purchase of train tickets, and be relieved of his baggage immediately. Placed opposite the gangway these booths greatly reduce the traveler's problems. An information clerk is also stationed in each to assist in compiling itineraries.

✣

*A Swarm of Bees*

"stole a ride" on a Canadian National express train recently, emerging from their hiding place at every stop to exercise their wings. Passengers alighting from the train scooted for shelter when they saw the bees flying up and down the platform in squadron formation. When the train started they swooped back to the train. The performance was repeated at every station from Alabama to Prince Edward Island.

✣

*An Amazing Nerve Test*

for boys, as well as locomotive engineers, came to light recently when a British magistrate reprimanded three youngsters. Each lay with his head on the railroad track and the one who kept it there the longest, in front of an approaching train, was adjudged the nerviest of the group. After several trains were stopped, and one youth narrowly escaped death, the boys were haled into court.

✣

*An Aged Commuter,*

who for 20 years had daily caught the 7:48 A. M. train from Ilford (England) to London, was recently missed by his fellow passengers. A few days ago he died, at the age of 78. At the funeral there was a wreath, inscribed "The 7:48 Train."

*Railroading Kings*

now number two: King Boris of Bulgaria, who frequently pilots locomotives, has been joined by Ananda Mahidol, age 11, recently proclaimed king of Siam. Asked if he was glad to have been made king, he replied, "No, I'd much rather play at railroading. Look, I've a complete toy set of locomotives, cars, stations and signals."

✣

*Dreadful Death and Mutilation*

were in store for brave mortals who dared to ride the early English railroad trains, according to an advertisement published by a stage coach owner in a desperate attempt to hold his business. The entire poster read, "Wives, Mothers, Sisters, and Aunts, Beware of the Railway. Avoid a dreadful death and Mutilation. Go by Stage Coach. This is by far the Safest and most Pleasant Mode of Travelling."

✣

*A Rail-Bus War*

in India has been terminated after the railroad had recaptured a lion's share of the passenger traffic involved. The Madras & Southern Mahratta Railway used drastic fare reductions as its chief weapon in the fight. Intensive publicity campaigns, advertising various festivals along the line, printed in English and several native tongues, were also used to advantage.

✣

*New Locomotives*

are being turned out at the rate of over 4 a day in Russia. The 1935 program calls for the completion of 1,485, including 470 of the Santa Fe (2-10-2) type. Experiments with a pulverized fuel locomotive are being made which, if successful, will open up a new field for using coal of a quality that at present is unusable for locomotives.

*The Montana Earthquake,*

which caused widespread damage near Helena, also destroyed an orphanage, rendering 150 children homeless. The Northern Pacific Railroad immediately offered coaches to serve as a temporary home for the children until permanent buildings could be erected. No, the busses weren't running then.

✣

*Police Dogs*

have been used by German Railways, both as watch dogs and for tracking down lost objects or suspected persons, since just after the war. First used in Berlin, the dogs proved so efficient that now there are over 700 in service. Six breeds have been used, although the German sheep-dog has been found the most satisfactory.

✣

*Travel-Minded Turkeys*

are causing a Leon, Kansas, farmer's wife considerable concern. Just the other day she dashed out of the house to investigate the cause for the persistent tooting of a locomotive whistle. She saw the engine moving slowly with 50 of her prize birds clustered about it.

✣

*Tickets to Hell*

are bought as souvenirs by tourists in Norway who have no intention of making the journey their purchase entitles them to. Hell is a station on the main line between Trondheim and Sweden.

✣

*Derailments Happen*

only too frequently as it is, but it remained for a British draftsman to "plan" one. Instructed to prepare a sketch of a derailment which had occurred, the genius labelled his effort "Site of Proposed Accident."

# A New Year Wish

*HEALTH enough to make work a pleasure. Wealth enough to support your needs. Strength enough to battle with difficulties and overcome them. Grace enough to confess your sins and forsake them. Patience enough to toil until some good is accomplished. Charity enough to see some good in your neighbor. Love enough to move you to be useful and helpful to others. Faith enough to make real the things of God. Hope enough to remove all anxious fears concerning the future.*—GOETHE.